

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 90 - 089

SITE CLEANUP REQUIREMENTS FOR:

HEWLETT PACKARD COMPANY
1501 PAGE MILL RD.
PALO ALTO
SANTA CLARA COUNTY

STANFORD UNIVERSITY
PALO ALTO
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. Site Description Hewlett-Packard Company operates an electronics research and production facility at 1501 Page Mill Road. The land has been leased by the Hewlett-Packard Company from Stanford University since 1957. Hewlett-Packard Company is primarily responsible for this discharge and is hereinafter called a discharger for purposes of this Order. Stanford University is secondarily responsible for purposes of this Order.
2. This site was proposed for addition to the National Priority List (NPL) on October 15, 1984 and since that time the site has been regulated based on CERCLA and Health and Safety Code requirements. On September 12, 1989 the discharger was notified that the site was dropped from consideration as an NPL site because the site is regulated under the Resource Conservation and Recovery Act (RCRA). The Regional Board will continue to regulate the discharger's remediation and enforce consistent with CERCLA as amended by SARA.
3. The site is located along the border between the foothills of the Santa Cruz mountains and the Santa Clara Valley between Page Mill Road and Hanover Street. The site consists of seven buildings which house two separate Hewlett-Packard divisions: The Stanford Park Division and Hewlett-Packard Laboratories. The site also consists of two chemical storage sheds and the corporate gas station (See site map, Attachment 1).
4. Board Orders On May 17, 1989, the Board adopted Order No. 89-081 prescribing Site Cleanup Requirements for this site. This

present Order sets tasks and submittal dates for final site remediation to be consistent with the Health and Safety Code and the National Contingency Plan. This order also rescinds Order No. 89-081.

5. Lead Agency Designation The discharger's Palo Alto site was proposed for inclusion on the National Priorities List (NPL) under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) but was dropped from consideration because the site is regulated under RCRA. Pursuant to the South Bay Multi-Site Cooperative Agreement and the South Bay Groundwater Contamination Enforcement Agreement, entered into on May 2, 1985 (as subsequently amended) by the Board, the Environmental Protection Agency (EPA) and the Department of Health Services (DHS), the Board has been acting as the lead agency overseeing cleanup of the site. The Board will continue to regulate the discharger's remediation and enforce consistent with CERCLA as amended by the Superfund Amendment and Reauthorization Act of 1986 (SARA).
6. Hydrogeology The site is located on a ridge which is oriented in a northeast to south/southwest direction. The ground slopes northeastward from the site toward San Francisco Bay. The water table occurs at depths of approximately 50 to 60 feet below the surface. Beneath the water table to a depth of approximately 250 feet below surface. The subsurface geology consists of interlayered clays, silts and sands of variable lateral extent. An inferred fault has been identified on the property in the vicinity of Building 20.
7. Site History Nine underground solvent and waste solvent storage tanks were installed at the site between 1960 and 1978. All of these tanks have been removed. Past investigations have shown that five of these tanks had leaked chemicals into the subsurface soils. These five tanks have been excavated along with some soil containing chemicals.

Chlorinated solvents and aromatic solvents have been found in groundwater in the vicinity and downgradient of the two chemical storage sheds. It is believed that this pollution was possibly caused by five of the former underground storage tanks located in the vicinity of the storage sheds which had leaked. Additionally, a plume of predominantly Trichloroethylene (TCE) has been detected northeast of Building 1 towards Page Mill Road. The source is being investigated. It needs to be defined, the lateral and vertical extent of contamination determined and a remediation program developed and implemented.

8. Soil Investigation and Remediation Soil borings associated

with soil contamination investigations have been conducted in the vicinities of the excavated tanks which had been shown to have leaked. Additionally, soil borings have been conducted in the vicinity of the corporate gas station.

Interim soil remediation has consisted of three vapor recovery systems installed in the vicinity of former underground tanks (2, 4A, 4B, 4F, and 4G). These systems have been operating since mid- 1987. In addition, a vapor recovery system has been operational at the corporate gas station since mid 1989.

9. Groundwater Investigations and Remediation A total of 71 groundwater monitoring wells have been constructed on the site, three of these wells are used as extraction wells. The primary contaminants detected on a regular basis in these monitoring wells include trichloroethylene (TCE), 1,1,1-trichloroethane (TCA), acetone, benzene, and xylene.

The investigation of chemicals in the groundwater downgradient of the chemical storage shed has met previous Site Cleanup Requirements. However, further groundwater investigations are necessary to characterize all contamination on the discharger's property with emphasis on the lateral and vertical extent of TCE contamination northeast of Buildings 1 and 2 towards Page Mill Road. These investigations have been identified in a workplan dated April 9, 1990 and eight new monitoring wells have been installed. More wells may be needed depending upon what is found in these monitor wells. Additionally, more work may be necessary on the site as described in comments on the original remedial investigation / feasibility study (RI/FS) submittal. The discharger submitted a proposal for further work on May 21, 1990.

Groundwater extraction began in January 1988 from three wells located in the vicinity of the chemical storage sheds (wells 29, EW-1, and EW-2). The groundwater extraction rate has been under 10 gallons per minute and the groundwater is currently being treated with activated carbon prior to disposal to the sanitary sewer.

10. Draft Remedial Action Plan (RAP) The discharger submitted a RI/FS on January 19, 1990. This report was reviewed and comments have been forwarded to the discharger. The RI/FS needs to be revised to incorporate ongoing subsurface investigations and feasibility studies. A revised Remedial Action Plan (RAP) will also need to be submitted, consistent with the Health and Safety Code requirements for a final remedial action plan and the National Contingency Plan (NCP) requirements for an RI/FS. The RAP will contain a comparative analyses of remedial alternatives, remedial action objectives, a summary of the baseline public health evaluation, preferred

cleanup alternative, and a time schedule.

11. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for South San Francisco Bay and contiguous surface and groundwaters.
12. The existing and potential beneficial uses of the groundwater underlying and adjacent to the dischargers facilities include:
 - a. Industrial process water supply
 - b. Industrial service supply
 - c. Agricultural supply
 - d. Municipal and domestic supply
13. The discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.
14. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
15. The Board has notified the dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharges and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
16. The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the discharger shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS:

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect beneficial uses of the waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities associated with the subsurface investigation and

cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS:

1. The storage, handling, treatment or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharger shall conduct monitoring activities as needed to define the local hydrogeological conditions, and the lateral and vertical extent of the soil and groundwater pollution. Should monitoring results show evidence of pollution migration, additional plume characterization of pollutant extent shall be required.
3. The interim remediation of contaminated groundwater and soil at the site shall continue.

C. PROVISIONS:

1. The discharger shall submit to the Board acceptable monitoring program reports containing results of work performed according to a program prescribed by the Board's Executive Officer.
2. The discharger shall comply with this Order immediately upon adoption with the exception that the discharger shall comply with Prohibitions A.1., A.2., and A.3., and Specifications B.1. to B.3. as modified in accordance with the following time schedule and tasks listed below. Within sixty (60) days of the Executive Officer's determination and actual notice to Stanford University that the "primarily responsible" discharger under this Order has failed to comply with this Order, Stanford University, as landowner of the property at 1501 Page Mill Road, shall itself then be responsible for complying with this Order.

COMPLETION DATE/TASK:

- a. 1) **COMPLETION DATE:** October 17, 1990

TASK: INTERIM PROGRESS REPORT - THE LATERAL AND VERTICAL EXTENT OF CONTAMINATION: The discharger shall submit a technical report acceptable to the Executive Officer that describes the known vertical and lateral extent of groundwater contamination on the site and that has left the site.

- b. 1) **COMPLETION DATE:** April 8, 1991

TASK: FINAL REPORT - THE LATERAL AND VERTICAL EXTENT OF CONTAMINATION: The discharger shall submit a technical report acceptable to the Executive Officer that describes the vertical and lateral extent of groundwater contamination coming from the site. This will be an update of the earlier Remedial Investigation submitted in January, 1990.

- c. 1) **COMPLETION DATE:** June 10, 1991

TASK: PROPOSED FINAL CLEANUP OBJECTIVES AND ACTIONS: Submit a technical report acceptable to the Executive Officer, containing the results of the feasibility study evaluating alternative final remedial measures; and a separate technical report acceptable to the Executive Officer containing the Remedial Action Plan (RAP) which recommends measures necessary to achieve final cleanup objectives; and the tasks and time schedule necessary to implement the recommended final remedial measures. All investigative work proposed by the discharger for purposes of complying with this Order, shall be submitted to and approved by the Executive Officer before work commences. These proposals may be in letter format, and shall include the data necessary to adequately evaluate the proposal. Draft technical data, e.g. boring logs or chemical analyses results, shall be submitted to staff with monthly status reports. The submittal of technical reports evaluating immediate, interim and final remedial measures will include a projection of the cost, effectiveness, benefits and impact on public health, welfare and environment of each alternative measure. The remedial investigation and feasibility study shall be consistent with the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300); Section 25356.1 (c) of the California Health and Safety Code; CERCLA guidance documents with reference to Remedial Investigation, Feasibility Studies, and Removal Actions; and the State Water Resources Control Board's Resolution No. 68- 16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California".

3. If the discharger is delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the dischargers shall promptly notify the Executive Officer and the Board may consider revisions of this Order.
4. Technical reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be

submitted monthly to the Board commencing with the report due July 17, 1990 monitoring the previous months activities. On a monthly basis thereafter, these reports shall consist of a letter report that, (1) summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report, (2) identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles, and (3) includes, in the event of non-compliance with Provision C.2. or any other Specification or Provision of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order.

On a quarterly basis, commencing with the report due July 17, 1990 the quarterly reports shall include, but need not be limited to, updated water table and piezometric surface maps for all affected water bearing zones, cross-sectional geological maps describing the hydrogeological setting of the site, and appropriately scaled and detailed base maps showing the location of all monitoring wells and extraction wells, and identifying adjacent facilities and structures. The Administrative Record shall also be updated quarterly beginning July 17, 1990.

5. The discharger shall submit to the Board technical reports acceptable to the Executive Officer. Chemical plume definition and remedial investigations shall be conducted, and technical reports prepared to meet all applicable performance goals listed below as necessary to complete the Remedial Investigation/Feasibility Study (RI/FS):

CHEMICAL ASPECTS:

1. The discharger's plume should be defined laterally and vertically by water quality measurements and for all chemicals released from the discharger's site, and their transformation products within a plume, at least to the level of appropriate water quality criteria.
2. The source of chemicals should be identified for each point of discovery.
3. The chemical, physical, and biological fate, e.g. adsorption, biodegradation, transformation, etc., should be determined for each chemical (and/or transformation product) released from the discharger's site within a plume.
4. All sampling should be done in a manner that ensures the

highest degree of accuracy and precision pursuant to approved Quality Assurance Project Plans, or Site Sampling Plans.

5. The chemical distribution pattern within the saturated soil should be established to an extent sufficient to maximize remedial efficiency.

HYDROGEOLOGIC ASPECTS:

1. Lithologic units should be monitored individually so that chemical concentrations, both original chemicals and their daughter products, within each individual unit are determined.
2. The entire hydrostratigraphic unit should be adequately monitored to ensure both a representative and nondilute sample. This should occur at the plume boundaries and at other locations to provide support for investigative conclusions, and to confirm the adequacy and efficiency of remediation.
3. A sufficient number of monitoring wells should be installed to ensure that all classes of chemicals, e. g. "sinkers" versus "floaters", are detected and monitored.
4. Hydraulic interconnections, either vertical or lateral, and the effect of any interconnections on chemical movement should be documented and defined.
5. Hydraulic information for the investigative area should be of sufficient quantity and quality to maximize extraction efficiency during remediation.

GEOLOGIC ASPECTS:

1. Sampling during well, boring or piezometer installation should ensure the following:
 - a. that information is obtained for 100% of the subsurface.
 - b. that detailed lithologic and physical descriptions with estimates of the amount of lithologic constituents are obtained in addition to any other classification systems.
 - c. that the individual chemical concentrations of each lithologic strata within the borehole are determined by a reliable and systematic manner of sampling when sampling is done to meet the above goals.
2. Hydrostratigraphic zones should be defined by documenting the existence of a significant, continuous and widespread aquitard underlying both the specific well location and the entire investigative areas. Should the hydrostratigraphic zone remain undefined because such documentation is not provided, continued vertical migration will be considered possible throughout the area

and monitoring beneath the contaminated zone will be required.

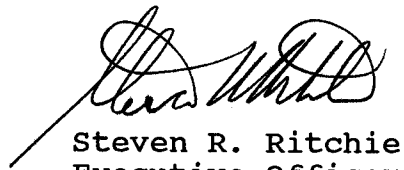
3. Critical lithologic designations should be confirmed by laboratory analysis.
4. Stratigraphic correlations should be done utilizing lithologic logs in conjunction with additional data on the physical characteristics of the strata obtained from methodologies other than those used to produce the lithologic logs.
6. All hydrogeological plans, specifications, reports, and documents shall be signed by or stamped with the seal of a registered geologist, engineering geologist or professional engineer. This requirement shall not apply to monthly reports and quarterly progress reports provided the hydrogeological information contained in these reports has been submitted or is scheduled for submittal by a registered geologist, engineering geologist, or professional engineer.
7. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.
8. The dischargers shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
9. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, shall be provided to the following agencies:
 - a. Santa Clara Valley Water District
 - b. Santa Clara County Health Department
 - c. City of Palo Alto
 - d. State Department of Health Services/TSCD
 - e. U. S. Environmental Protection Agency, Region 9

The Executive Officer may additionally require copies of correspondence, reports and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order to be provided to a local repository for public use and for compilation of an Administrative Record.

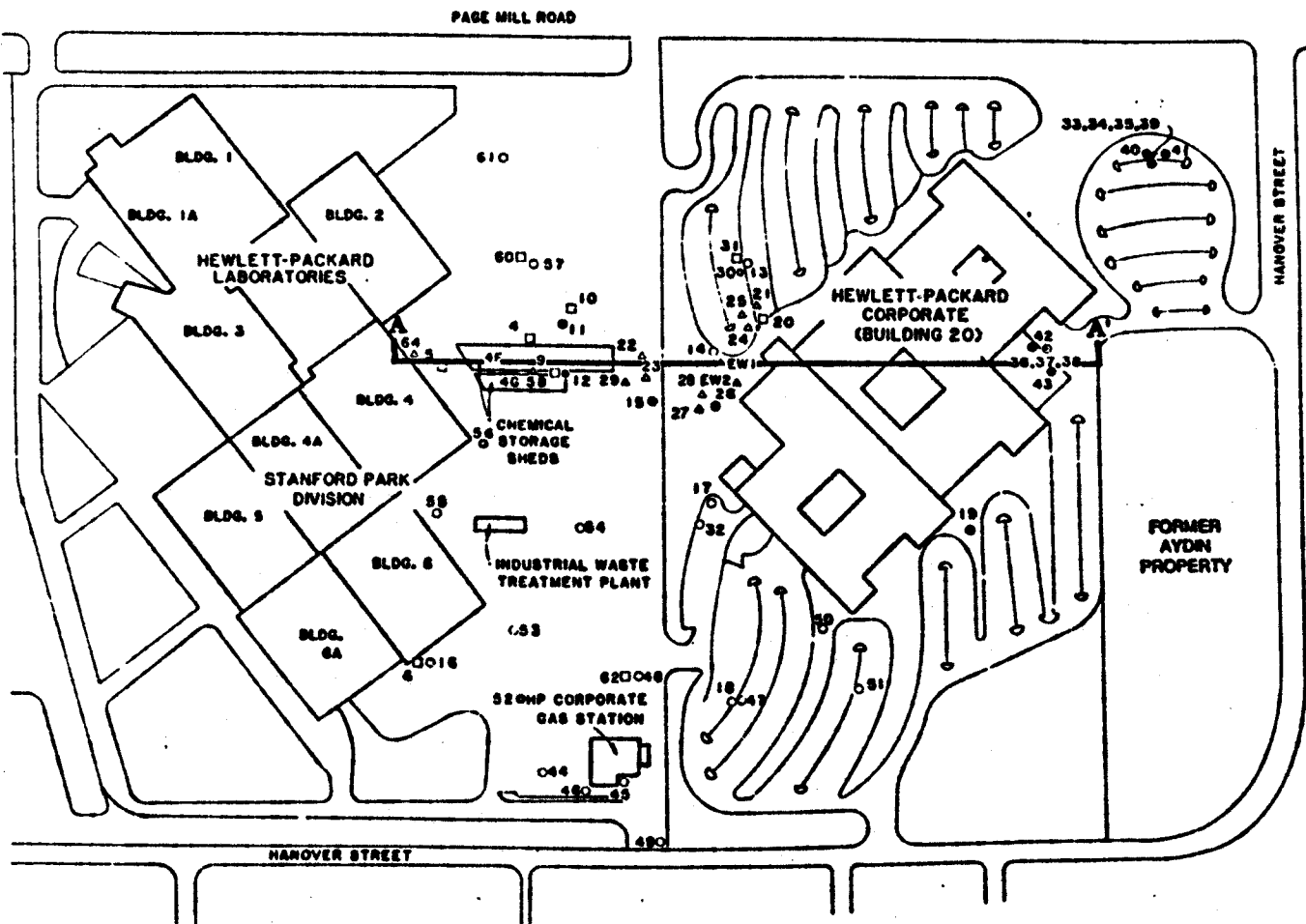
10. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:

- a. Entry upon premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or methodology implemented in response to this Order.
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
11. The discharger shall file a report on any changes in site occupancy and ownership associated with the facility described in this Order within 60 days of said changes.
 12. If any hazardous substance is discharged in or on any waters of the state, or discharged and deposited where it is, or probably will be discharged in or on any waters of the state, the dischargers shall report such discharge to this Regional Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-business hours. A written report shall be filed with the Regional Board within five (5) working days and shall contain information relative to: the nature of waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention, Control, and Countermeasure (SPCC) Plan in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons/agencies notified.
 13. The Board will review this Order periodically and may revise the requirements when necessary.
 14. Regional Board Order No. 89-081 is hereby rescinded.

I, Steven R. Ritchie Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 20, 1990.



Steven R. Ritchie
Executive Officer



LEGEND

- MONITOR WELL COMPLETED IN FIRST FLOW ZONE
- MONITOR WELL COMPLETED IN FIRST AND SECOND FLOW ZONES
- MONITOR WELL COMPLETED IN SECOND FLOW ZONE
- ▲ MONITOR WELL COMPLETED BELOW SECOND FLOW ZONE
- MULTIPLE COMPLETION MONITOR WELL
- SHALLOW MONITOR WELL
- ▲ EXTRACTION WELL COMPLETED IN FIRST AND SECOND FLOW ZONES
- GEOLOGIC CROSS-SECTION LINE

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

HEWLETT-PACKARD COMPANY
1501 Page Mill Road

Site Location

ATTACHMENT 1

DRAWN BY:

DATE:

DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

HEWLETT-PACKARD COMPANY
1501 PAGE MILL ROAD FACILITY
GROUNDWATER SELF-MONITORING PROGRAM

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a waste discharger's monitoring program, also referred to as a self-monitoring program (SMP), are: (1) To document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) To develop or assist in the development of effluent or other limitations, discharger prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) To prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the EPA Method 8000 series described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", dated November 1986; or other methods approved and specified by the Executive Officer of this Regional Board.

Whenever possible, all reporting and detection limits for all analyses shall be less than the state action level, or the Maximum Contaminant Level, whichever is smaller.

Turbidity measurements in NTU units shall be taken before a groundwater sample is collected from each well. Results of the analyses shall be reported to the Board with the quarterly sampling results.

C. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Violations of Requirements

In the event the discharger is unable to comply with the conditions of the site cleanup requirements and prohibitions due to:

- a. maintenance work, power failures, or breakdown of waste

treatment equipment, or

b. accidents caused by human error or negligence, or

c. other causes such as acts of nature, or

d. poor operation or inadequate system design, or

e. construction project, the discharger shall file a written technical report describing the incident within 15 days to the Executive Officer. Said report shall describe the nature of the incident, and costs and scheduling of all action necessary to preclude such future discharges.

2. Self-Monitoring Reports

a. Reporting Period:

(1) Written reports shall be filed regularly each quarter within forty-five days from the end of the quarter monitored.

b. Letter of Transmittal:

A letter transmitting self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period and actions taken or planned for correcting any requirement violation. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to this correspondence will be satisfactory. Monitoring reports and the letter transmitting reports shall be signed by either a principal executive officer or his duly authorized employee. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

c. Data Results:

(1) Results from each required analysis and observation shall be submitted in the quarterly self-monitoring regular reports. Results may also be submitted in the monthly report or be discussed on a weekly basis with board staff. All chromatographic peaks for purgeable halocarbons and/or volatile organics shall be identified and quantified if a peak is identified in two consecutive samples.

(2) The quarterly reports if noncompliance occurs, shall include a discussion of unexpected operational changes which could affect performance of the extraction system, such as flow fluctuations, maintenance shutdown, etc.

(3) The quarterly report shall also identify the analytical procedures used for analyses either directly in the report or by reference to a standard plan accepted by the Executive Officer. Any special methods shall be identified and should have prior

approval of the Board's Executive Officer.

(4) The discharger shall describe, in the quarterly SMR, the reasons for significant increases in a pollutant concentration at a well onsite. The description shall include:

1) the source of the increase,

2) how Hewlett-Packard determined or will investigate the source of the increase, and

3) what source removal measures have been completed or will be proposed.

(5) Original lab results shall be retained and shall be made available for inspection for three years after origination or until after all continuing or impending legal or administrative actions are resolved.

(6) A map shall accompany the quarterly report, showing all sampling locations.

(7) The discharger shall describe in the quarterly monitoring report the effectiveness of the actions taken to regain compliance if compliance is not achieved. The effectiveness evaluation shall include the basis of determining the effectiveness, water surface elevations for each well used to determine water surface elevation contours and water quality data.

(8) The annual report shall be combined with the fourth quarter regular report and shall include cumulative data for the current year. The annual report for December shall also include minimum, maximum, median and average water quality data for the year.

d. Self-Monitoring Program Revisions:

Additional long term or temporary changes in the sample collection frequency and routine chemical analysis may become warranted as monitoring needs change. These changes shall be based on the following criteria and shall be proposed in a quarterly SMR. The changes shall be implemented no earlier than 45 days after self-monitoring report is submitted for review or not at all if the proposal is found to be unacceptable.

Criteria for SMP revision:

(1) Discontinued analysis for a routine chemical parameter for a specific well after a one-year period of below detection limit values for that parameter.

(2) Changes in sampling frequency for a specific well after a one-year period of below detection limit values for all chemical parameters from that well.

(3) Temporary increases in sampling frequency or changes in requested chemical parameters for a well or group of wells because of a change in data needs (e.g., evaluating groundwater extraction effectiveness or other remediation strategies).

D. DESCRIPTION OF SAMPLING STATIONS
Groundwater


<u>Stations</u>	<u>Description</u>
Listed in Table 1	Monitoring wells, observation wells, and extraction wells.

E. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling and analysis is given in Table 1.

I, Steve R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data established in Regional Board Order No. 90-089.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the dischargers and revisions will be ordered by the Executive Officer.


Steven R. Ritchie
Executive Officer

Effective Date: June 20, 1990

Attachment: Table 1

TABLE 1

GROUNDWATER SELF-MONITORING PROGRAM SAMPLING PLAN

Well	Frequency	Zone	Analyses
8	SA	2	8010 + EDB, 8020 + Acetone
18	Q	1	8010 + EDB, 8020 + Acetone
19	Q	A	8010 + EDB, 8020 + Acetone
22	Q	5	8010 + EDB, 8020 + Acetone
24	Q	4	8010 + EDB, 8020 + Acetone
25	Q	3	8010 + EDB, 8020 + Acetone
27	Q	5	8010 + EDB, 8020 + Acetone
28	SA	4	8010 + EDB, 8020 + Acetone
30	Q	1	8010 + EDB, 8020 + Acetone
31	Q	2	8010 + EDB, 8020 + Acetone
32	Q	2	8010 + EDB, 8020 + Acetone
33	SA	1	8010 + EDB, 8020 + Acetone
34	SA	2	8010 + EDB, 8020 + Acetone
35	SA	4	8010 + EDB, 8020 + Acetone
36	Q	1	8010 + EDB, 8020 + Acetone
37	SA	2	8010 + EDB, 8020 + Acetone
38	SA	4	8010 + EDB, 8020 + Acetone
39	SA	5	8010 + EDB, 8020 + Acetone
49	Q	1	8010 + EDB, 8020 + Acetone
50	SA	1	8010 + EDB, 8020 + Acetone
51	SA	1	8010 + EDB, 8020 + Acetone
62	Q	2	8010 + EDB, 8020 + Acetone

SA - Semi Annually
Q - Quarterly